

be monitored and/or logged by a mobile device and/or within an EMR. In some cases, the first module can be programmed to emit an alert to the patient or other persons if the monitored patient-condition parameters fall outside a predetermined range. In some embodiments, the first module can transmit a signal to a monitoring client to conduct an unscheduled measurement by the patient-care device to obtain another patient-condition parameter. The first module may communicate with various health care providers at various locations, and in an embodiment may be able to notify the patient to whom it is assigned of an abnormality, and recommend corrective action through, for example an audible alert or recorded message.

[0007] In one embodiment, a system for preparing a microinfusion pump includes a monitoring client, a pharmacy computer, a compounding robot, a microinfusion pump, and a data download device. The monitoring client is configured to communicate a prescription order via a user interface. The pharmacy computer is in operative communication with the monitoring client to receive the prescription order. The compounding robot is configured to prepare the prescription into at least one liquid corresponding to the prescription order. The microinfusion pump is configured to receive the at least one liquid corresponding to the prescription order. The data download device is configured to download the prescription order into a memory of the microinfusion pump.

[0008] In some embodiments, the compounding robot fills the microinfusion pump with the at least one liquid. The compounding robot may be in operative communication with the data download device, and the compounding robot may instruct the data download device to download the prescription order into the memory of the microinfusion pump. The data download device may receive the prescription order from the compounding robot and/or the pharmacy computer. In some embodiments, the compounding robot receives the prescription order from the pharmacy computer.

[0009] In one embodiment of the present disclosure, a system includes a hub. The hub is configured to monitor a patient-care device. The hub includes an operating system (which may be embodied as a processor executing software) and a sandbox component (which may be embodied as a processor executing software). The operating system component is configured to access at least one of a hardware resource of the hub and a software resource of the hub.

[0010] The sandbox component is configured to control the access to the at least one of the hardware resource and the software resource. The hub is further configured to identify the patient-care device and execute an application to monitor the patient-care device. The hub may execute the application within the sandbox component such that the application accesses the at least one of the hardware resource and the software resource through the sandbox component.

[0011] The hub may be further configured to control the patient-care device. The patient-care device may be one or more of an infusion pump, a pill dispenser, a microinfusion pump, an ECG monitor, a blood pressure monitor, a pulse oximeter, a CO₂ capometer, an intravenous bag, and/or a drip-flow meter.

[0012] The hub may be configured to receive an identification (e.g., a serial number, code (encrypted or unencrypted), or other identifying value) from the patient-care device and download the application from a server associ-

ated with the identification. The hub may also be configured to receive an identification from the patient-care device and update the application from a server associated with the identification.

[0013] The hardware resource may be a disk drive, memory, a buzzard, a microphone, a speaker and a camera. The software resource may be of a variable, a secure data object, a secure variable, a secured API, an API, and a software representation of a hardware component.

[0014] In yet another embodiment, a system for electronic patient care includes a hub. The hub is configured to monitor a patient-care device. The sandbox may be configured to control access to at least one of a hardware resource and a software resource. The hub is further configured to identify the patient-care device and execute an application to monitor the patient-care device. The hub executes the application within the sandbox component such that the application accesses the at least one of the hardware resource and the software resource through the sandbox component. The hub may be further configured to control the patient-care device. The hub may be further configured to receive an identification from the patient-care device and download the application from a server associated with the identification. The hub may be further configured to receive an identification from the patient-care device and update the application from a server associated with the identification.

[0015] The hardware resource may be a disk drive, memory, a buzzard, a microphone, a speaker and a camera. The software resource may be of a variable, a secure data object, a secure variable, a secured API, an API, and a software representation of a hardware component.

[0016] In yet another embodiment, a system for electronic patient care includes a monitoring client. The monitoring client is configured to monitor a patient-care device. The monitoring client includes an operating system component configured to access at least one of a hardware resource of the monitoring client and a software resource of the monitoring client. The sandbox component is configured to control the access to the at least one of a hardware resource and the software resource. The monitoring client may be further configured to identify the patient-care device and execute an application to monitor the patient-care device. The monitoring client executes the application within the sandbox component such that the application accesses the at least one of the hardware resource and the software resource through the sandbox component. The monitoring client is further configured to control the patient-care device.

[0017] The patient-care device may be an infusion pump, a pill dispenser, a microinfusion pump, an ECG monitor, a blood pressure monitor, a pulse oximeter, and/or a CO₂ capometer, an intravenous bag, and a drip-flow meter.

[0018] The monitoring client may be further configured to receive an identification from the patient-care device and download the application from a server associated with the identification. The monitoring client may be further configured to receive an identification from the patient-care device and update the application from a server associated with the identification.

[0019] The hardware resource may be a disk drive, memory, a buzzard, a microphone, a speaker and a camera. The software resource may be of a variable, a secure data object, a secure variable, a secured API, an API, and a software representation of a hardware component.